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India

PLANNING PROCEDURE IN INDIA

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No. 177 H

PLANNING PROCEDURE IN INDIA

by

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The raison d'etre of economic planning in India is to accelerate the process of economic and social change in a relatively stagnant economy and traditional society. For about a hundred years India followed under foreign rule the policy of laissez faire. There was no doubt some progress but this was only in patches. The average rate of growth of national income hardly exceeded that of population. Tradition still largely governed economic behaviour inlarge parts of the country and the modern scientific spirit hardly touched any one outside a small elite group in urban areas. It was the failure of laissez faire to bring about the desired change at a fast enough pace that turned the attention of India's national leaders to economic planning. Moreover, when India obtained independence, her economy which had always been poverty-ridden, was badly affected by war, famine and partition. Her people who had just achieved political democracy were impatient for economic improvement. The country which comprised an amazing variety of castes, creeds, languages and territorial units was in urgent need of some unifying factor.

2. In the special situation that obtained in India she could not leave things entirely to the rough and tumble of market forces lest it led to disparate developments in different sectors of the economy or unduly encouraged current consumption at the expense of investment and future growth. She could not also afford to have too centralised a system of controls which would be not only incompatiable with freedom and democracy but might also engender considerable resistance from various territorial and functional constituents of the rather heterogeneous economy that she has. India has, therefore, tried to evolve a procedure of economic planning which is not too rigid or centralised and yet able to mobilise the willing cooperation of the people for a balanced programme of rapid economic development. The procedure that India has evolved falls, therefore, somewhere in between broad economic policy making as in a country like the U.K. and detailed economic planning as in a country like the U.S.S.R. The nearest parallel to it in Western Europe is the French system of planning and in Eastern Europe the Yugoslav system of planning. The main difference, however, is that unlike France India has a federal structure of Government and the achievement of a socialist pattern of society is her avowed objective and unlike Yugoslavia she permits private ownership of capital and gives a much larger latitude to the operation of the competitive forces in a market economy.

3. It is felt in India that the widespread acceptance of the process of planning by the people and the concerned officials is even more important than the end-results of the planning exercise itself. For, the process of planning essentially means the application in a comprehensive manner of scientific methods in dealing

with problems of economic development and keeping in view the inter-relations of different sectors as well as the needs of the future. Active participation in this process by the key personalities in the economic life of the country opens up by itself new vistas of thought and action, creates a new spirit and ambition among the people and generates new forces for accelerating the development of the economy and the society.

4. The procedure of planning that has been evolved in India over the last decade is specially designed to achieve this objective. It has now become essentially a backward and forward process - an exercise in successive approximation and successive coordination and a combination on the one hand of perspective planning, five year planning and annual planning and on the other of national planning, sectoral planning and regional planning.

5. Keeping in view the basic political and social objectives of the Government, the National Planning Commission carries out first a number of econometric and other technical studies regarding the perspective of long-term development and prepares a perspective plan of 15 to 20 years mainly in broad physical terms. This perspective plan is prepared on what is known as the "rolling" basis and primarily as an internal exercise preparatory to the formulation of the next five year plan. For instance when the Second Five Year Plan was prepared for the period 1956-57 to 1960-61, the perspective plan was for the period 1956-57 to 1970-71 (or 1975-76 for some sectors). Again when the Third Five Year Plan was prepared for the period 1961-62 to 1965-66, a new perspective plan was prepared for the period 1961-62 to 1975-76 (or 1980-81 for some sectors). This enabled each perspective plan to take note of the new facts which had come to light or changes in technology which had taken place since the previous perspective plan was prepared.

6. The Five Year Plan is then formulated in the light of the perspective plan but unlike the latter it is not yet prepared on a "rolling" basis. The question of formulating the next Five Year Plan on a "rolling" basis, is, however, currently under consideration. The first step in the preparation of the Five Year Plan which is formulated both in physical and financial terms is to make a number of projections for demand and supply for the next five years in the light of the current trend of economic forces and keeping in view the perspective plan and the accepted model of development. The model of development may change from Plan to Plan according to changing circumstances. For instance, in India's First Five Year Plan, the main objectives were to rehabilitate the economy from the damages done by the War and the Partition and there was no serious balance of payment problem. The model adopted then was of the Harrod-Domar type. The level of saving as determined by the difference between the marginal and average rates of saving was taken to set the limit to the magnitude of capital formation and an attempt was made to maximise the current rate of growth of the economy through a planned difference between the marginal and the average rates of saving in a general way. At the time of the formulation of the Second Plan, when the country had developed to a certain extent and was ready for the next stage, and yet faced serious balance of payment difficulties it was felt that in a continental type of economy with limited scope for expanding exports and limited capacity to import, as in India, the magnitude of capital formation depended not merely on the difference between the marginal and average rates of saving but also on the capacity to produce capital goods. It was, therefore, considered more appropriate to adopt an alternative model as developed by Mahalanobis in which a distinction was made between investment for the production of capital goods and investment for the production of consumer goods. The importance of loca-

ting the highest possible fraction of investment to the capital goods sector was emphasised in as much as it resulted in the highest possible marginal rate of saving. The emphasis was more on the creation of the maximum growth potential for the future, and early attainment of the stage of self-reliant growth, rather than on the maximisation of the current rate of growth only. Although the Third Plan is based on more or less the same model of development as the Second Plan, there is now a clearer recognition of the fact that the range of choice as to what type of capital goods might be produced in a plan period e.g., whether these could be used to produce consumer goods or to produce further capital goods would, in the situation that now obtains in India, depend to a large extent on the type and character of capital goods that could be produced during the previous period.

7. It may, however, be mentioned that econometric models have been so far used only to a very limited extent in India and that also only in connection with preliminary exercises for providing a unifying principle and for determining the broad structure of the economy to be aimed at. Once that structure has been decided upon, the model has little practical significance for subsequent exercises in which the judgement of experienced people based on various social, economic, technical and administrative considerations really plays the determining role.

8. On the basis of the preliminary exercise of the type described above, a few key figures e.g., population projections, targets for national income, savings, investment, employment, etc. are worked out on a provisional basis in the Planning Commission and then a number of working groups at the Centre and in the States proceed to formulate tentative plans for their respective sectors or regions in the light of these key figures.

9. When the recommendations of these working groups are available, a process of balancing begins in the Planning Commission, of supply of various goods and services against demand, of exports against imports, of raw materials against finished products, of production against consumption, of savings against investment of financial resources against physical resources, of employment against labour force, of training programmes against man-power requirements, etc. Allowance is also made for contributions likely to be made by human factors, e.g., improvement in skill and efficiency. Although an attempt is made to ensure the maximum possible balance in the Plan, some imbalance is often found to be unavoidable. This is sought to be adjusted through monetary and fiscal measures as well as physical controls. This sort of exercise is first undertaken for the preparation of a draft outline of the Five Year Plan and then repeated for the preparation of the final report of the Plan. In the latter exercise the provisional key figures which were used as the basis for the draft outline are reviewed and made firm in the light of comments made by various authorities and organisations in the country. The draft outline of the Plan is published several months earlier than the date when the final report of the Plan is to be issued and is discussed widely in the country, in the Press, Universities, Chambers of Commerce and the Parliament. At the same time the Central Ministers, State Governments and the District (of 15 or 20 blocks) and Block (of 100 villages) authorities not only give their comments but also work out their own provisional plans in the light of the broad targets given in the draft outline All these comments and plans are then examined and coordinated at successive higher levels and ultimately utilised by the Planning Commission for the preparation of the final report of the Five Year Plan.

10. In preparing the five year plan, programming techniques of various kinds, budgeting, method of balances, inter-industry tables, linear programming, etc. are followed in a selective manner for the over-all economy, for different sectors and for different purposes. The most common methods are, however, the first two. It has not yet been possible to make much use of inter-industry tables or linear programming except in limited fields.

11. Since for operational purposes five years is too long a period, five year planning is supplemented by an exercise in annual planning. The annual plan is really the national economic budget for a period of one year - an economic counterpart of the familiar financial budget. The preparation of annual plans provides on the one hand a much needed flexibility in the implementation of the five year plan and on the other sets out the programmes of development to be implemented every year with sufficient concreteness and detail. One of the main objectives of the annual plan is to take account of every new opportunity for development that may present itself and exploit it to the full for pressing the rate of growth of the economy to the maximum. Another objective is to ensure that the current five year plan dovetails into the next five year plan in a smooth way and no "knots in the bamboo", as it were, develop at the end of every five year plan.

12. In the planning procedure evolved in India the role of the National Planning Commission is two-fold, - (i) to originate policies for development, and (ii) integrate ideas and programmes for economic development formulated by other agencies in the country into a coordinated picture. The Planning Commission is essentially a non-political advisory body which makes recommendations to Government and has no sanctions of its own. Care has been taken to organise it neither as a pure research institute which is out of touch with the various political, economic or administrative problems nor as an administrative ministry which is too closely involved in day-to-day affairs and is prone to lack the perspective and detachment required of a national planning agency.

13. The Planning Commission has been organised essentially as a staff agency It is a multi-member body and the number of members varies from time to time. At present it has altogether 11 members. Five of these members are important Cabinet Ministers, viz., the Prime Minister, Minister of Planning, Labour & Employment, Minister of Finance, Minister in charge of Special Economic Coordination & Minister of Defence. Five are full-time members who are eminent public-men, administrators, and technical experts. The Honorary Statistical Adviser to the Cabinet is also a Member of the Planning Commission. Although the full-time members are not Cabinet Ministers as such, they enjoy the status of Ministers and are invited to attend the meetings of the Cabinet when subjects with which they are directly concerned are taken up for consideration. The Prime Minister of India has been the Chairman of the Planning Commission ever since its inception. This has added considerably to the prestige of the Commission and has helped it a great deal in its coordinating functions at the political level. The Prime Minister, however, attends only the most important meetings of the Commission. The day-to-day work of the Commission is looked after by a Deputy Chairman. The Minister for Planning, Labour and Employment is at present working as the Deputy Chairman.

14. The staff of the Commission comprises a number of technical as well as administrative officers and is headed by a Secretary, who is also the Secretary to the Cabinet. As the Secretary to the Cabinet he is the Chairman of several inter-departmental Committees, including the Committee of Secretaries to the various Ministries dealing with economic matters. This arrangement, therefore, greatly

helps in achieving a close coordination between the work of the Planning Commission and the Ministries at the official level. As the duties of the Cabinet Secretary take much of his time, Secretary of the Planning Commission concerns himself mainly with the problems of over-all coordination of the work of the Planning Commission with those of the Ministries. There is an Additional Secretary who devotes his full time to the work of administration and coordination within the Commission.

15. For the purpose of coordination with the States, the Planning Commission has three senior officers known as Advisers (Programme Administration). These officers are selected for their intimate knowledge of the working of State Administrations. Each of them has a group of States allotted to him and helps to maintain close liaison between the Planning Commission and the groups of States with which he is concerned and gives necessary advice and guidance to the Executive Authorities of the States and brings the difficulties and problems of the latter to the notice of the Planning Commission and the Central Ministries.

16. The office of the Planning Commission consists of three types of branches, viz.,(i) General Branches, (ii) Subject Branches, and (iii) House-keeping Branches. The work in the first two types of branches is primarily technical and in the third, administrative or secretariat. The general branches either carry out studies relating to the Plan as a whole rather than to any particular sector or coordinate the work of the various subject branches. There are altogether 10 general branches in the Planning Commission e.g.,Perspective Planning,Statistics and Surveys; Economic, Plan Coordination, Programme Administration, Resources and Scientific Research, International Trade and Development, Labour & Employment, Public Cooperation and Information & Publicity. Among the general branches, the Perspective Planning Branch is responsible for the formulation of projections and plans for a long period, while the other branches primarily concern themselves with work relating to the Five Year or Annual Plans. One of the responsibilities of the Programme Administration Branch is to assist the Advisers (Programme Administration) in their day-to-day work regarding the coordination of the planning efforts of the States with those of the Central Government. The subject branches are altogether 12 in number e.g.,Agriculture, Community Development & Cooperation and Rural Works,Irrigation & Power, Oil and Minerals, Large-Scale Industries, Village & Small Scale Industries, Transport & Communications, Education, Health, Housing and Social Welfare. The subject branches of the Planning Commission maintain close contact with their counterparts in the various Ministries and the State Governments and are responsible for collecting, processing and analysing all relevant information required for the formulation, progressing and evaluation of the policies and programmes included in the Plan. They also organise various research studies which are deemed necessary for the purpose of planning in their respective fields either on their own or through competent technical organisations in the country. The main house-keeping branches are Administration, General Coordination and Organisation and Methods. They are staffed mainly by administrative or secretariat personnel.

17. The staff of the Planning Commission at present comprises 15 Administrators, 167 Technical Officers and a complement of 634 junior technical and secretarial personnel. The annual budget of the Commission amounts to Rs. 5.6 million. Bulk of the technical officers are permanent employees of the Planning Commission but quite a substantial proportion of them, especially in the higher ranks, and almost all the administrative officers are borrowed on a tenure basis from the Central Ministries and State Governments. While it is essential that there should be a core of permanent officers in the Planning Commission to concentrate on long-term planning work and build up the special expertise needed to carry-forward the valuable experience gathered over the years, it is equally important that there should

be periodical inter-change of officers between the Planning Commission and the Ministries and States. It promotes a better understanding of one another's problems and difficulties, introduces fresh blood from time to time, counteracts the danger of in-breeding of ideas in the Planning Commission and provides the executive agencies with a number of officers who have a close familiarity with the process of planning and a broad view of the problems of the national economy.

18. The senior positions in the general and subject branches of the planning Commission are usually held by technical personnel. Bulk of them are Economists or Statisticians. But, there are also a number of Scientists, Agriculturists, Engineers Physicians, Educationists, etc. The work of coordination between different branches is usually done either by general administrators who have gathered considerable experience in planning and development work or by senior technicians who have acquired a wide knowledge of public affairs and general administrative competence. Since in a Five Year Plan different strands have to be woven into an "organic whole" general coordinators are as essential as the subject matter specialists and as planning involves both management and technical operations, officers with administrative and technical competence are equally necessary.

19. Bulk of the detailed technical work regarding indiyidual projects proposed to be included in the Plan, is, however, done not in the Planning Commission but by the Ministries and their attached offices, technical institutes and expert consultants. Technical Officers in the Ministries concentrate on the details of projects under consideration and examine the various technical issues primarily from the limited angle of the sector with which the Ministries are specially concerned. Technical Officers in the Planning Commission, on the other hand, examine the same matters from the point of view of the economy as a whole and concentrate on studying carefully the inter-relations between the various projects which are under consideration and their implications for the future. Close collaboration between these two sets of officers in the work of planning is considered essential for ensuring that both the trees and the wood are equally taken care of.

20. To make the best possible use of the technical knowledge and administrative experience available in the Ministries, the Planning Commission has found it advantageous to set up a number of working groups comprising selected administrators, economists and technicians from various Central Ministries and Divisions of the Planning Commission as a means of coordinating the work of the Ministries with its own in formulating plans of different sectors of the economy. For instance, in connection with the formulation of the Third Five Year Plan as many as 22 Working Groups were set up and some of these Working Groups in their turn appointed a number of sub groups. A Steering Group on Industry, Transport and Power was also appointed with the Secretary of the Planning Commission as Chairman to coordinate the studies made by the concerned Working Groups and Ministries. The Working Groups are appointed by the Planning Commission. The Secretary of the Ministry mainly concerned is appointed as Chairman so as to ensure fullest cooperation between the Ministries and the Planning Commission. The Working Groups usually comprise 10 to 15 members and include technicians, economists and administrators from the different Ministries concerned as well as from the Planning Commission. In fact the system of appointing a number of Working Groups at the stage of the formulation of a Plan is an important part of the Indian planning procedure. Theoretically it is conceivable that a small team of experts in the Planning Commission working all by themselves can formulate a Plan which may be technically a very good job. But chances are that some very important administrative or social points may not be given due consideration by this small body of planning experts. The Plan prepared by them may also suffer in the matter of acceptance as well as implementation

because it would not give those key people who are to carry it out a sense of participation. There seems to be considerable merit in the practice followed in India which seeks from the very beginning to associate with the Planning exercise some of the people who are expected to implement the Plan through the system of Working Groups and sub-groups. This ensures that those who are to implement the Plan will not only have a sense of participation in the formulation of the Plan, and therefore, more enthusiasm for carrying it out but also a better understanding of the decisions taken and, therefore, a better degree of efficiency in actual operation. The Reports of the Working Groups generally indicate what should be the long-term (15 to 20 years) targets in their respective fields and if these long-term targets are accepted, what should be the corresponding Five Year targets. They also indicate in some detail policies and programmes needed for achieving these five-year targets. The Working Groups naturally take into consideration the various studies made in different Ministries, State Governments, Research Organisations and Industrial Enterprises in the country. The reports are studied carefully in the Planning Commission where, if necessary, the views of advisory groups of non-officials are also obtained and requisite adjustments are made. Sometimes the Working Groups are asked to reconsider and revise their proposals in the light of the comments made by the advisory groups of non-officials and the Planning Commission. It is on the basis of the sectoral programmes formulated in this manner that first the Draft Outline of the Plan and thereafter the final plan are prepared by the Planning Commission.

21. Much of the detailed technical work in connection with planning is thus done in the Working Groups which comprise mainly the concerned officials in the Central Ministries and the Planning Commission. But, there is need, especially in an economy of the size and complexity of India to consult from time to time other knowledgeable people also, especially non-official experts, at various stages of formulation as well as implementation of the Plans in regard to general policy. These consultations have necessarily to be at different levels technical, administrative and political. These consultations not only elicit valuable advice and bring fresh views to bear on official thinking but also help in securing for the Plan a greater public understanding and give it a national character. An attempt is made to have such consultations through a number of Standing Bodies variously known as Panels, Advisory Committees or Consultative Committees. Panels comprise mainly experts, Advisory Committees are more broad based and comprise both experts and public men and Consultative Committees comprise Members of Parliament only. At present there exist altogether eight Panels e.g., Panel of Scientists, Panel of Economists and Panels on Agriculture, Land Reforms and Health, Ayurveda (an indigeneous system of medicine), Education and Housing and Regional Development. There are at present four Advisory Committees e.g., Advisory Committee on Irrigation, Flood Control and Power Projects, Rural Industries Planning Committee, National Advisory Committee on Public Cooperation and Committee on Land Reforms. There are two consultative Committees (i) Consultative Committee of Members of Parliament for the Planning Commission, and (ii) Prime Minister's Informal Consultative Committee for Planning. The first Committee which is presided over by the Minister of Planning comprises those members of Parliament who express a desire to be closely associated with the work of the Planning Commission. The Second Committee is a much smaller body and comprises leaders of important political groups in Parliament and is presided over by the Prime Minister himself. These two Consultative Committees have between them helped to give the Indian Plans much more of a national character than would have been the case otherwise.

22. Although the Planning Commission was the only institution for planning in the earlier years of economic planning in India, it was soon found that it was

impossible for a single institution to deal adequately with the multifarious aspects of the formulation as well as implementation of the Plan for economic development of a country of the size and complexity of India. Moreover, it was also necessary that a number of key organisations at different levels should actively participate in the planning exercise if the process of planning was to inform effectively their policies and actions. Steps were, therefore, taken to develop a number of other institutions for planning at various functional and territorial levels.

22. At the functional level, the most important planning institutions are the Central Ministries, their planning cells and attached organisations. In many cases important policies and programmes originate in the Ministries, the Planning Commission's main task being to fit them into the over-all picture and coordinate them with the programmes of other Ministries. In other cases the ideas developed in the Planning Commission have to be given concrete shape by the Ministries concerned. It has been found necessary to set up planning cells in the more important Ministries to deal with the various problems relating to planning which confront them. The Planning Commission has particularly close relation with the Ministry of Finance. Not only is the Minister for Finance ex-officio Member Incharge of Finance in the Planning Commission but the Secretary of the Ministry of Finance is the Chairman of the Working Group on Financial Resources and the Chief Economic Adviser to the Ministry of Finance is also ex-officio Economic Adviser to the Planning Commission. The Planning Commission also maintains close contacts with the Ministry of Commerce & Industry. Under the Industries Development & Control Act, the Ministry of Commerce & Industry has set up 18 Development Councils to help the development of selected industries. These Councils comprise representatives of private sector enterprises, technicians, labourers and consumers besides a number of official experts and provide useful forums for consulting the private sector.

24. Besides these consultations through the Development Councils, the Planning Commission also consults representatives of important private sector industries. In connection with the formulation of the Third Five Year Plan, the Planning Commission met representatives of 28 important industries separately. It also consulted their three representative organisations viz., the Federation of Indian Chambers of Commerce & Industry, the Associated Chambers of Commerce of India and the All-India Manufacturers' Association. Some of these organisations employ special expert staff for the preparation of comprehensive plans for the development of their respective sectors or even for the economy as a whole and submit them for the consideration of the Planning Commission.

25. There are three important Committees, e.g., Industrial Licensing Committee, Capital Goods Committee and Foreign Agreements Committee, in the work of which the representatives of the Planning Commission actively participate along with those of the Finance and Commerce & Industries Ministries. These Committees are responsible for scrutinising proposals for setting up new industries or substantial expansion of old ones, release of foreign exchange for capital goods and authorising proposals for collaboration between Indian and foreign enterprises and are important agencies for ensuring that the development of industries, especially in the private sector, broadly follows the pattern laid down in the Plan.

26. Almost all the Central Ministries have their own Advisory Bodies, Research Departments and Technical Institutes. Some control a number of public enterprises. The advice of all these organisations is available to the Planning Commission usually through the Ministries and sometimes even directly. Some of the bigger enterprises have their own programming and design organisations which prepare material for sectoral planning required by the Ministries concerned as well as by the Planning Commission.

27. Besides the Central Ministries there are two official organisations which are independent of the Planning Commission and yet closely associated with its work and deserve special mention here. These are - (i) The Reserve Bank of India, and (ii) The Department of Statistics. There is an Economics Department in the Reserve Bank which is in close touch with the work of the Planning Commission and undertakes important studies on financial and banking matters for the Commission. The Department of Statistics in the Cabinet Secretariat is responsible for organising the collection of all statistical data required for the purpose of planning.

28. One of the most important functions of the Planning Commission is to keep a watch over and evaluate the actual working of various programmes and projects included in the Plan. The members and senior officers of the Planning Commission carry out special inspections and investigations from time to time with this object in view, and its different Divisions keep a careful watch over the progress of important projects in their respective sectors. However, the main responsibility for supervision of programmes and projects included in the Plan and ensuring that they are implemented efficiently and according to schedule has been placed squarely on the administrative departments concerned at the Centre and the States. The Planning Commission takes care not to interfere with this responsibility and confines itself only to general appraisal made in close collaboration with the administrative departments concerned.

29. For the purpose of evaluating the performance of various organisations responsible for implementing projects and programmes included in the Plan, there are two special bodies - (a) Committee on Plan Projects and (b) Programme Evaluation Organisation. The Committee on Plan Projects sets up specialist teams for undertaking investigations and field inspections of important projects both at the Centre and in the States. These teams are usually headed by an eminent non-official and comprise both official and non-official experts. They are provided with technical assistance by the Secretariat of the Committee. The Programme Evaluation Organisation was originally set up for making a systematic and periodical assessment of the methods and results of the Community Development Programme. But, its functions are now being extended to cover a number of other important programmes, especially in the field of rural development. Its field staff act as the eyes and ears, as it were, of the Planning Commission.

30. Planning means adaptation as well as innovation. As such intensive research in a number of economic, social, administrative, technical and scientific problems is given high priority in Indian planning. For undertaking research in economic, social and administrative problems related to economic development, the Planning Commission has set up a special organisation viz., the Research Programmes Committee. This Committee invites research projects from interested research workers and also initiates projects of its own, gives necessary technical guidance and direction to the research workers and provides them with financial assistance. In addition, there are several non-official institutes e.g., Indian Statistical Institute, the National Council of Applied Economic Research, the Institute of Economic Growth, the Gokhale Institute of Politics & Economics and the Indian Institute of Public Administration which have been assisted by the Planning Commission in various ways and are closely associated with its socio-economic and administrative studies. Some of them also provide training courses in economic planning, statistics and administration. So far as the technological and scientific aspects are concerned, necessary research is done in the various Technical Research Institutes in the country set up by the Central Ministries or State Governments. The main

coordinating agencies are Council of Scientific and Industrial Research, Indian Council of Agricultural Research and Indian Council of Medical Research. A Committee on Natural Resources has recently been set up in the Planning Commission to promote studies in the field of utilisation and conservation of natural resources. Organisations like the Survey of India, Geological Survey of India, Indian Bureau of Mines, Oil and Natural Gas Commission, Central Water & Power Commission, forest Research Institute, Indian Council of Agricultural Research, Council of Scientific and Industrial Research, etc. are closely associated with the work of this Committee.

31. As there is a Plan for the country as a whole, similarly there are separate Plans for each constituent State of India, which form an integral part of the national Plan. At the State level the main institution responsible for the preparation of the State Plan is the State Planning Department which works directly under the Chief Minister of the State. This Department is responsible for liaison between the Planning Commission and various departments of the State Governments, coordination of their programmes for development and formulation of the development plan for the State as a whole. As in the case of the Planning Commission at the Centre, the Planning Department in States usually works through a system of Working Groups. It formulates the Plan in the light of the main guide-lines received from the Planning Commission and general directives given by the Council of Ministers of the State. It consults the sister departments as well as such Advisory Bodies as may be set up for the different sectors and the Development and Planning Bodies set up at the Districts. Each State has set up either a Development Board or a Planning Advisory Committee for helping the State Planning Department. This Board or Committee comprises selected Ministers, officials and non-officials. The Plan formulated by the State Planning Department is submitted first to the Council of Ministers of the State and then to the State Development Board or Planning Advisory Committee and finally to the State Legislature.

32. Below the State level an attempt is made to undertake planning at the level of the District and the Block. This is done jointly by the officers of the various Development Departments working at these respective levels and a number of non-official representatives. The District officers and the Block Development Officers are responsible for necessary coordination at the District and Block levels respectively. These District and Block Planning authorities who are given a rough idea of the assistance that is likely to be available from outside make an assessment of their own resources and needs and formulate the programme for the development of their respective areas.

33. An attempt is being made to carry the process of planning further down to the village level but so far it has covered only a relatively small number of villages. The ultimate objective in India is to have a Plan for each village and each enterprise and then build up the Block, District, State and National Plans through a process of successive coordination and successive approximation. Some experiments in village and enterprise planning has been undertaken but it has not yet been found practicable to prepare the National Plan on the basis of these plans prepared at the lowest levels.

34. One of the most difficult problems of planning in a country like India which has a federal government and wide disparity not only between one State and

another but also within a particular State is how to coordinate the plans and policies of the Central and State Governments on the one hand and of the State Governments and various territorial units in a State on the other. The institution that has been set up in India for coordination at the State level has already been mentioned earlier viz., The State Development Boards or Planning Advisory Committees. In these Boards or Committees not only the Ministers but also a number of important non-officials and representatives of different regions in the States are represented and these bodies try to thrash out various problems of ploicy and allocation of resources within the State. The institution that has been set up at the Centre for coordination of policies and plans of the Central and State Governments is called the National Development Council. This Council comprises the Prime Minister of India as the Chairman, the Chief Ministers of States and the Members of the Planning Commission as Members. The Ministers of the Central Government also participate in its deliberations and the Council makes its recommendations to the Central as well as the State Governments. Like the Planning Commission, the National Development Council is essentially an advisory body from the strictly legal point of view. Since, however, it comprises the highest political authorities in the country it has by convention acquired a unique position and its recommendations are treated with the highest deference by the Central Ministries and the State Governments. The National Development Council gives its advice at various stages of the formulation of a Plan and it is only after its approval has been obtained that the Plan is presented to the Parliament for consideration. The National Development Council has been largely responsible for giving the Indian Plan a truly national character and for ensuring a national unanimity in approach and uniformity in working.

35. The procedure for planning which has been evolved in India over the last twelve years has been largely influenced by the special features of the economic and political situation in India and the special problems which the country has faced. The important point to note, however, is that the Indian planning procedure is essentially a decentralised one and the Indian Plan is essentially a frame-work plan characterised by a considerable amount of flexibility. It lays down only the main parameters and fixes the broad targets. The Indian Planning Commission is only one of a large number of planning institutions that has been set up in the country over the last twelve years (see chart I) and the integrating function of the Indian Planning Commission is as important as the originating part of its work. Both the process of planning and the institutional set up for planning in India are, however, in the process of constant evolution. As the economy develops, more sophisticated methods become increasingly necessary and as the public is required to take a progressively greater role in implementing different sectors of the Plan, greater opportunities have to be given to different sections of the people for active participation in the process of planning.

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UNITED NATIONS CONFERENCE
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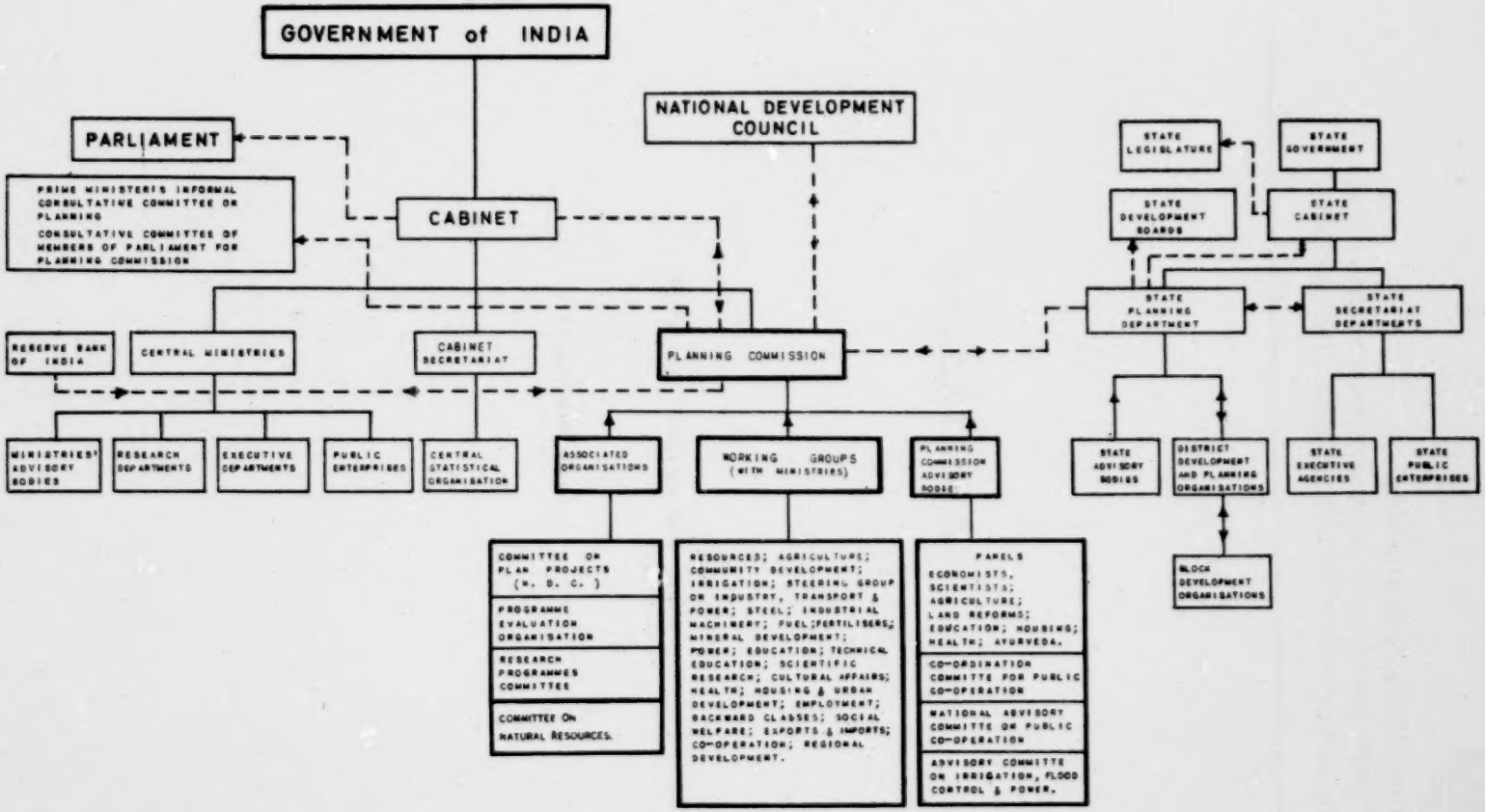
C O R R I G E N D U M

The following chart was omitted by error :

(see overleaf)

CHART - 1

PLANNING MACHINERY IN INDIA


GOVERNMENT of INDIA
PARLIAMENT
PRIME MINISTER'S INFORMAL CONSULTATIVE COMMITTEE ON PLANNING
CONSULTATIVE COMMITTEE OF MEMBERS OF PARLIAMENT FOR PLANNING COMMISSION
CABINET
NATIONAL DEVELOPMENT COUNCIL
RESERVE BANK OF INDIA
CENTRAL MINISTRIES
CABINET SECRETARIAT
PLANNING COMMISSION
MINISTRIES' ADVISORY BODIES
RESEARCH DEPARTMENTS
EXECUTIVE DEPARTMENTS
PUBLIC ENTERPRISES
CENTRAL STATISTICAL ORGANISATION
ASSOCIATED ORGANISATIONS
WORKING GROUPS (WITH MINISTRIES)
PLANNING COMMISSION ADVISORY BODIES
COMMITTEE ON PLAN PROJECTS (M. D. C.)
PROGRAMME EVALUATION ORGANISATION
RESEARCH PROGRAMMES COMMITTEE
COMMITTEE ON NATURAL RESOURCES.
RESOURCES; AGRICULTURE; COMMUNITY DEVELOPMENT; IRRIGATION; STEERING GROUP ON INDUSTRY, TRANSPORT & POWER; STEEL; INDUSTRIAL MACHINERY; FUEL; FERTILISERS; MINERAL DEVELOPMENT; POWER; EDUCATION; TECHNICAL EDUCATION; SCIENTIFIC RESEARCH; CULTURAL AFFAIRS; HEALTH; HOUSING & URBAN DEVELOPMENT; EMPLOYMENT; BACKWARD CLASSES; SOCIAL WELFARE; EXPORTS & IMPORTS; CO-OPERATION; REGIONAL DEVELOPMENT.
PANELS
ECONOMISTS, SCIENTISTS; AGRICULTURE; LAND REFORMS; EDUCATION; HOUSING; HEALTH; AYURVEDA.
CO-ORDINATION COMMITTE FOR PUBLIC CO-OPERATION
NATIONAL ADVISORY COMMITTE ON PUBLIC CO-OPERATION
ADVISORY COMMITTE ON IRRIGATION, FLOOD CONTROL & POWER.
STATE LEGISLATURE
STATE GOVERNMENT
STATE DEVELOPMENT BOARDS
STATE CABINET
STATE PLANNING DEPARTMENT
STATE SECRETARIAT DEPARTMENTS
STATE ADVISORY BODIES
DISTRICT DEVELOPMENT AND PLANNING ORGANISATIONS
STATE EXECUTIVE AGENCIES
STATE PUBLIC ENTERPRISES
BLOCK DEVELOPMENT ORGANISATIONS

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11 Oct.1962
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UNITED NATIONS CONFERENCE
ON THE APPLICATION OF SCIENCE AND TECHNOLOGY
FOR THE BENEFIT OF THE LESS DEVELOPED AREAS

SUMMARY

Agenda Item: "

India

PLANNING PROCEDURE IN INDIA

By Dr. S.R. SEN,
Joint Secretary,
Planning Commission, India

Papers have been contributed to the United Nations Conference on the Application of Science and Technology for the Benefit of the Less Developed Areas as working papers for that Conference. They are published as presented by the contributors, and the contents and the views expressed are those of the contributors. (See notes overleaf.)

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No. 177 F

PLANNING PROCEDURE IN INDIA

by

Dr. S.R. Sen

Joint Secretary, Planning Commission, India

SUMMARY

1. The raison d'etre of economic planning in India is to accelerate the process of economic and social change in a relatively stagnant economy and traditional society.

2. The procedure of planning that has been evolved in India over the last decade is essentially a backward and forward process - an exercise in successive approximation and successive coordination and a combination on the one hand of perspective planning, five year planning, annual planning and on the other of national planning, sectoral planning and regional planning.

3. Keeping in view the basic political and social objectives of the Government, the National Planning Commission prepares first a perspective plan of 15 to 20 years mainly in broad physical terms and on what is known as the "rolling" basis.

4. The Five Year Plan is formulated both in physical and financial terms and the first step in its preparation is to make a number of projections for demand and supply for the next five years in the light of the current trend of economic forces and keeping in view the perspectiveplan and accepted model of development.

5. On the basis of these preliminary exercises a few key figures are worked out on a provisional basis in the Planning Commission and then a number of working groups at the Centre and in the States proceed to formulate tentative plans for their respective sectors or regions in the light of these key figures.

6. When the recommendations of these working groups are available a process of balancing begins in the Planning Commission. Although an attempt is made to ensure the maximum possible balance in the Plan some imbalance is often found to be unavoidable. This is sought to be adjusted through monetary and fiscal measures as well as physical controls. This sort of exercise is first undertaken for the preparation of a draft outline of the Five Year Plan and then repeated for the preparation of the final report of the Plan. The draft outline of the Plan is published several months earlier than the date when the final report of the Plan is to be issued and is discussed widely in the country. At the same time the Central Ministries, State Governments and the District and Block Authorities not only give their comments but also work out their own provisional Plans in the light of the broad targets given in the draft outline. All these comments and plans are then examined and coordinated at successive higher levels and ultimately utilised by the Planning Commission for the preparation of the final Report of the Five Year Plan.

7. In preparing the Five Year Plan programming techniques of various kinds, budgeting, method of balances, inter-industry tables, linear programming etc., are followed in a selective manner for the over-all economy, for different sectors and for different purposes. The most common methods are, however, the first two.

8. Since for operational purposes five years is too long a period, the five year plan is supplemented by an exercise in annual planning. The annual plan is really the national economic budget for a period of one year - an economic counter-part of the familiar financial budget.

9. In the planning procedure evolved in India the role of the National Planning Commission is two-fold - (i) to originate policies for development, and (ii) integrate ideas and programmes for economic development formulated by other agencies in the country into a coordinated picture. The Planning Commission is essentially a non-political advisory body which makes recommendations to Government and has no sanctions of its own. It has been organised essentially as a staff agency.

10. For the purposes of evaluating the performance of various organisations responsible for implementing projects and programmes included in the Plan, there are two special bodies, - (a) Committee on Plan Projects, and (b) Programme Evaluation Organisation.

11. Planning means adaptation as well as innovation. As such intensive research in a number of economic, social, administrative, technical and scientific problems has high priority in Indian planning. For undertaking research in economic and social problems, the Planning Commission has set up a separate organisation, viz., the Research Programmes Committee. So far as the technological and scientific aspects are concerned, the main coordinating agencies are Council of Scientific and Industrial Research, Indian Council of Agricultural Research and Indian Council of Medical Research. A Committee on Natural Resources has recently been set up in the Planning Commission to promote studies in the field of utilisation and conservation of natural resources.

12. Although the Planning Commission was the only institution for planning in earlier years of economic planning in India, it was soon found that it was impossible for a single institution to deal adequately with the multifarious problems of a country of the size and complexity of India. Steps were, therefore, taken to develop a number of other institutions for planning at various functional and territorial levels. At the functional level, the most important planning institutions are - the Central Ministries, their Planning Cells and Attached Organisations. As far as territorial planning is concerned, the main institution responsible for the preparation of the Plan at the State level is the State planning Department. It is supported by Planning Organisations at the District and Block levels. The ultimate objective in India is planning from village and enterprise upward. Some experiments have been made but it has not yet been found practicable.

13. One of the most difficult problems of planning in a country like India is how to coordinate the plans and policies of the various authorities, Central, State, District and Block. The institution for coordination at the State level is the State Development Board or State Planning Advisory Committee. The institution that has been set up at the Centre for coordination of policies and plans of the Central and State Governments is called the National Development Council. This Council comprises the Prime Minister of India as the Chairman and the Chief Ministers of States and the Members of the Planning Commission.

14. The Indian Plan is essentially a frame-work plan characterised by a considerable amount of flexibility and decentralisation. Both the process of planning and the institutional set up for planning in India are, however, still in the process of evolution.

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UNITED NATIONS CONFERENCE
ON THE APPLICATION OF SCIENCE AND TECHNOLOGY
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Agenda Item: H.1

Food and Agriculture Organization

RESEARCH REQUIREMENTS AND TYPES OF INFORMATION NEEDED FOR AGRICULTURAL DEVELOPMENT PLANNING

By E.M. OJALA,
Chief,
Agricultural Development Analysis Branch
Economic Analysis Division, FAO, Rome

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Research Requirements and Types of Information Needed for Agricultural Development Planning

by

E. M. Ojala, Chief, Agricultural Development Analysis Branch
Economic Analysis Division, FAO, Rome

1. The purpose of planning is to arrive at a set of objectives considered desirable and possible in the process of development, to be achieved by a more thorough and coordinated use of resources. The general objectives are translated into specific goals and targets established for a certain period of years ahead. The means for attaining them are indicated with varying degrees of precision.

2. The precision can be greatest for the development activities that fall within the scope of direct government action. For such items e.g. construction of roads and major dams, the decisions about means for achieving goals are (or should be) reflected in a planned allocation of the government expenditure over the period of the plan. In economies where private enterprise is important, much of the activity required will have to be undertaken by private agencies or individuals. In this case, the formulation of a national development plan will entail not only a program of direct government action, but also a series of measures for guiding the decisions of private producers in conformity with the basic objectives and targets.

3. In the planning of agricultural development in low-income countries this two-pronged approach is particularly important. In such countries agriculture is typically organized in small family units, although in some cases there are also large estates. The latter are usually well oriented towards development. In the predominant small-holdings group, it is the production decisions of the heads of farm families or of tribal leaders that determine whether and how fast traditional farming methods give way to improved techniques, and so whether the plan targets are reached on time or not. Agricultural plans must include measures that impact the farmers in the village, changing the environment in such a way that they are encouraged, induced, convinced, enabled or taught to make new production decisions that are in line with the national objectives. However, in many such countries the capacity for private investment in agriculture is too small; and the capacity for cooperative action so weak, that the government has to play a strong direct role. This is especially the case when large scale works are required to overcome basic resource limitations e.g. the provision of irrigation water in arid areas.

4. Whatever the appropriate combination of private and public investment, the planning of agricultural development does not proceed in a vacuum but in an economy already functioning. Planning is a matter of bringing about changes in the tempo and/or distribution of the current production effort. Decisions have to be made as to the direction and amount of the changes to be sought, and as to the means to be employed for influencing the production process in the manner desired.

5. It follows that for the planning of agricultural development, information is required on three counts: (a) to reveal and evaluate the resources currently used and potentially available for agricultural production; (b) to increase understanding of the functioning of the agricultural sector and the problems being encountered by producers; and (c) to enable quantitative relationships to be applied in the planning process, e.g. as between inputs and outputs, costs and benefits or between different sectors of the economy. There is probably no clear distinction between these three purposes, all of which may be served by one type of research. However, the priorities may differ for different purposes. For this paper the data needed will be considered in relation to the planning process.

Continuity of research

6. The first point to establish is that the planning of agricultural development cannot wait on the perfection of the data. In developing countries, and even in advanced countries, there are always deficiencies in the available data. It is important to initiate the process of planning, assembling the information available in relation to each successive step, and taking the most rational decisions possible. Note should be taken in passing of the gaps in the data and the optimum amount of resources should be allocated under the plan to research designed to fill them, with a view to the improvement of later planning efforts.

The general setting

7. A useful first step in the agricultural planning process could be an appraisal in general terms of the role of agriculture in the economy. This should include an estimate of the extent of demands likely to be made upon the rural sector by the general objectives of the plan, and the impact of the rural sector on the plan as a whole. If there has been a previous plan, its implementation should be critically appraised, and the general obstacles to agricultural development identified. Any long range factors to be taken into account should be noted. More detailed analysis would follow.

Estimation of demand and future requirements of agricultural products

8. This should be an early step in the agricultural planning process. At this stage the aim is to assess the quantities of the various agricultural products that would be needed during each year and by the end of the period of the plan, to satisfy the overall objectives and targets of the plan, including feasible improvements in nutritional levels.

9. To project the domestic demand for food with some degree of precision, information is needed on the size of the population and its rate of increase. If there are groups of population with very different food habits, these data should be sought for each main group likely to be affected under the plan. In this connection it is most important to consider the farm population separately,

1) Including changes in the proportions of farm and non-farm population.

but there may also be significant differences in food patterns between different agricultural zones within the country.

10. The rate of increase in national and per caput income being sought will be known from the overall framework of the plan. This will affect the rate of increase in food consumption, but not all foods will be affected in the same way. For more precise forecasting, data are needed on income elasticities of demand for different foods, or the relationships between increase of personal incomes and increase in demand. Then, if the present levels of food consumption are known, the amounts that will be needed in the future to satisfy demand without price changes can be predicted. Note should also be taken of the gaps between present levels of consumption and nutritionally desirable standards and of proposed measures for nutrition education and improvement, so that allowance can be made for changes that may result in the consumption of particular foods.

11. With regard to agricultural raw materials required for domestic industries, data would be needed on the impact of rising incomes on demand for the finished products, and on the technical coefficients of the industries . By applying this information to current usage and consumption, the future requirements of non-food products to be produced by the agricultural sector could be estimated.

12. It would then be useful to attempt, from looking at past records, a preliminary assessment as to how much of the total projected requirements of agricultural products would need to be imported, or what surplus could be available for export. This should give a first idea of the production targets for domestic agriculture. These first ideas might have to be changed in the light of overriding national targets for saving or earning foreign exchange, or of studies of the prospects for buying or selling in foreign markets, or later studies of domestic production possibilities.

13. It will be clear that a great deal of careful economic research is already required before planning activities can be carried to this stage with any degree of precision. Surveys on food consumption and nutrition are basic. They should be conducted for representative samples of farm households and urban households, and for different regions and socio-economic groups if necessary. They should preferably include data on food expenditures or be combined with household budget enquiries. This would provide data on food consumption levels and patterns and expenditure at different income levels. From these could be derived the coefficients of income elasticity of demand for different products of agriculture, and a good picture of the nutritional level of the population as a whole. Special diet and nutrition surveys of the most vulnerable groups of the population would reveal special nutritional problems. Surveys of the current and expected technical coefficients of main industries using agricultural raw materials would also be desirable for projections of future requirements of such materials. Careful reviews of the likely future demand overseas for agricultural exports are essential for primary exporting countries.

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2 . i.e. the amount of raw material required per unit of finished product.

3 . In countries undertaking overall planning, much of this work would be done in the planning unit concerned with the industrial sector.

4 . The industrial planning units would be most directly concerned with these studies.

14. Attempts to project demand for agricultural products should begin, even in the absence of the above aids to precision. In the simplest case, much can be learned about future needs from a study of the trends in imports, exports and prices, based on statistics of foreign trade which are available in every country.

Projections of Production of Agricultural Commodities

15. The next step could be to examine the production prospects in the agricultural sector. The starting point would normally be a study of the present pattern of agricultural production. As far as possible this would be done by more or less homogeneous agricultural zones within the country, to permit the more rational projection of output zone by zone.

16. This is a stage where the greater the amount of scientific information available about the functioning of the agricultural economy, down to the individual producer, the more effective the planning can be.

17. The first need is for up-to-date statistics of agricultural production, showing area planted with each main crop, numbers of livestock of various classes, and output of all main products. Data on the input side would be particularly useful but are harder to obtain, e.g. labour force available, tools, equipment, fertilizers and credit used, in addition to land. Information on the number and sizes of farms in different zones, the income levels of farm families, actual farming systems, and on the economic and institutional environment of the farmers is all extremely valuable in the planning process.

18. Agricultural statistics are a basic need. In their absence, quantitative planning of agriculture is severely limited. Rough estimates may be better than nothing, and may permit planning to begin. A national agricultural census should be undertaken on lines recommended by FAO to lead to or supplement the annual collection of agricultural statistics. The progressive improvement of such statistics, in coverage and reliability, should be provided for in successive plans.

19. To build up a body of scientific knowledge about agricultural production and the factors affecting it, research should be progressively developed on both the physical basis and the economics of farming. A map of current land use, however fragmentary in the beginning, is a useful starting point. It can provide a framework for research on the physical resources (topography, climate, vegetation including forests, soils, water) as well as the economic environment of agriculture (land tenure, farm sizes, markets, farming systems). The coordinated progress of such research can lead to the definition of the main farming regions that should be differentiated within the country, and the gradual preparation of maps of land use capabilities, which may be different from the current pattern of land use. Physical resource surveys are obviously needed for areas whose potential productivity under various agricultural uses is largely unknown, before their development is planned.

20. Farm management research has special usefulness. A program of farm management studies designed to record and analyse the patterns of input and output (including farm expenditure and income) on representative samples of farms in the main farming regions would be particularly helpful. Such studies would enable the factors of farm organization and management and of rural economy associated with better than average productivity (or worse than average) to be identified. Additional research projects in land tenure, farm credit, marketing and farm prices might be needed to elucidate further some of the problems or potentialities revealed. Such farm management studies repeated at intervals

of several years would provide a picture of the changes taking place in the main farming zones of the country and of the results being achieved and problems experienced by the producers.

21. It must be recognized that in most tropical developing countries only the merest beginnings have been made in the above types of research at the farm and village level. The information which such studies could provide would enable more effective agricultural development measures to be selected in such countries.

22. In the light of such statistics and research results as are available, projections should be attempted of the current trends of production of main commodities during the period of the plan. Allowances should be made as far as possible for any new programs and policies that have been or are to be started. By comparing these simple projections of production with the projections of demand (corrected for assumed imports and exports), it should be possible to see where special efforts are needed to modify the current trends of output.

The selection of development measures

23. This is a continuation of the previous step. The very concept of planning implies that current trends and patterns of production have to be changed. In the light of the national objectives and the needs of the sector, decisions have to be reached about the precise changes that are necessary, and the measures (investments) needed to bring them about. The choice of development measures is the hard core of planning.

24. In FAO we have come to recognize four types of government programs and policies for influencing agricultural development, as follows:

(a) measures which can directly increase production

(i) provision of material inputs, e.g. fertilizer and manures, improved seeds, irrigation, land development;

(ii) measures for improvement of efficiency, e.g. research, extension, improved agricultural practices, better farm management (some of these measures may entail more material inputs as well);

(b) measures which can create favourable conditions for farmers' decisions to increase production or improve productivity

(iii) provision of economic incentives, e.g. assured prices to producers, subsidies on the cost of improved inputs;

(iv) institutional reforms, e.g. land reforms, control of usury, institutional credit, improvement of marketing, service cooperatives.

25. The aim of planning is to select the combination of measures and projects which, in the circumstances of the particular country or sub-region, will produce the greatest result in terms of the national objectives under the plan, with the utmost economy in the use of the scarce resources available. In this essential phase of planning it is necessary to assess the relative costs (in terms of scarce resources) and benefits (e.g. additional output) for a whole series of proposed or possible measures and projects. In the ideal case a vast amount of accumulated data on technical, engineering and economic aspects of agriculture are needed. In practice in developing

countries the economic data are most commonly absent or insufficient.

26. It is essentially a process of economic analysis - the choice among alternative ways of achieving definite goals under the discipline imposed by the severe limitation of means. How much additional development expenditure should be allocated to direct, physical measures in competition with less direct measures which encourage farmers to intensify their production efforts? Another choice is whether the resources should be spread over the whole sector, or concentrated in relatively favourable zones where rapid development could "spearhead" economic progress for the whole economy. It is important to assess not only the cost of alternative inputs, projects and measures but also the returns to be expected from them, singly or in combination. If this information is not available, the risk of wasting scarce resources by allocation to less productive uses is great.

27. The previously mentioned studies of land use, descriptions of the main farming systems and surveys of farm organization and management are basic sources of vital data for planning at this stage also. Especially valuable are analyses of the responses to material inputs on individual farms e.g. fertilizers and irrigation in progressive amounts, singly, together, and combined with other inputs such as better seed and disease control measures, applied to different crops in different regions of the country. Studies of farm labour and farm employment in different systems of farming are also useful. This type of research should, if possible, be pushed to the point where quantitative relationships between inputs and outputs can be derived, as working tools of planning. Such tools should be used with caution and due allowance for the role of management and especially of improvements in management.

28. To provide a basis for assessing the likely response to economic measures and institutional reforms, research should be conducted at farm and village level on marketing channels and prices actually received by farmers for their products and prices paid for fertilizers and other inputs. The results of such research will be more informative if supplemented by field studies of farmers' indebtedness and sources of credit. Studies of the economic behaviour of farmers, particularly in relation to incentives (e.g. assured prices), disincentives (e.g. high share rents) and receptivity to new improved techniques, would also be highly relevant.

29. The planning in this stage is likely to become focussed on several major development schemes, such as fertilizer or processing factories, multipurpose irrigation and power projects or land development and settlement schemes, among which choices have to be made. The economic appraisal of these and other individual projects in developing countries still leaves much to be desired. Should current price relationships be projected or replaced by some concept of "shadow prices"? Can indirect benefits be ignored? Research and case studies to elucidate principles and to elaborate methodology would contribute very greatly to the more rational selection of development projects.

Successive approximations and the final plan

30. After completing the projections of agricultural production, with modifications resulting from the selection of development measures, the planning process should arrive at preliminary targets for the agricultural sector. There will be a list of projects, all considered technically feasible and economically efficient, and more or less in line with the national goals and resource availabilities. The estimated costs and returns will be shown.

31. It will inevitably be found that the first results do not balance in some important respects with the requirements of the national plan or of other sectors, e.g. as regards the targets of national income or rate of investment, the availability of foreign exchange and foreign aid, or the development of industries (processing plants, fertilizer or equipment factories). Adjustments will have to be made in certain parts of the plan, with matching adjustments elsewhere. Thus a series of successive approximations will have to be gone through. During this process the agricultural sector and its projects will come under repeated review. To the tests of efficiency will be added those of consistency, and some desirable projects may have to be eliminated or postponed because of an overall shortage of resources.

32. It is not unusual for the agricultural plan to suffer in this stage, because of weak economic analysis and a lack of supporting data. The types of research required are mainly those already indicated, carried out with greater depth or quantitative refinement. The tools of consistency analysis needed include, at the elementary level, resources budgeting or the balancing of all proposed usages of each scarce resource against estimated total supplies. At a much more sophisticated level, economic research leading to the preparation of input-output tables will be helpful.

33. When the matching adjustments are completed in a consistent framework for the overall national plan, the final shape of the agricultural plan will emerge, with production targets in line with projected demands and with the desirable levels and pattern of investment determined.

Implementation and review of plans

34. Implementation is the supreme test of the plan. Moreover, conditions change, affecting the availability of resources in any year. Reviews should therefore be undertaken annually and are an essential part of the planning process. Research and evaluative studies are required, but usually on an ad hoc basis. Certainly, it is important to analyse in depth the reasons for cases of notable failure or success in the implementation of plan projects, with a view to the improvement of subsequent plans. For this purpose the Government of India established, as a part of the Planning Commission, a permanent organization for program evaluation and research.

Perspective planning and long-term guidelines

35. Operational plans for economic and agricultural development usually cover a period of 4-6 years. As a guide to the general directions in which progress has to be made, some countries prepare a perspective plan, looking ahead 10 - 20 years. Examples are Ceylon, and Japan (10 years), India (25 years), U.S.S.R. (20 years). Such a long look ahead is particularly important in agriculture, since many of the changes that have to take place occur only slowly, and the returns on certain types of investment are a long time in coming. This is the case for forestry and tree crops, land use, development of new areas, soil conservation, large-scale irrigation, agricultural education, and the improvement of nutrition.

36. As in the preparation of short-term plans, projections are a basic element in perspective planning. The general approach and the data required are not different in principle from what has already been described. Since the projections are thrown much further ahead, however, the emphasis is on the broad outlines of change and development rather than on details. The perspective plan thus brings out and lays down the strategy or long-term guidelines for agricultural development, whereas the operational plan specifies the shorter-run tactics.

37. Seen in long-run perspective, questions of basic resources loom larger. Rapid population growth; the shift of employment from agriculture to industry; the changes in demand, food consumption and nutritional objectives that accompany a long period of rising incomes will entail major changes in resource use that should be foreseen and taken into account in agricultural planning. This emphasizes the need for basic surveys of land, forest and water (including fishery) resources, and maps of land-use capabilities. Such maps should be based on scientific description of the physical characteristics of the resources, with special reference to limitations or potential productivity. In perspective planning the physical features would have to be assessed in the light of projected economic and technological conditions affecting the production of particular commodities.

38. Many types of research already recommended will yield results that are highly relevant in this context. In addition to resource surveys, long range reviews of market demand, both domestic and export, are essential to guide the development of farming systems towards products in continuing demand. Farm management studies can reveal the factors of input, organization and technology associated with high productivity per hectare and per head, which must become the norms of the future, entailing vast changes in the structure of the rural economy as regards farm sizes, farm labour force, commercial supply and distribution of farm requisites and commercial marketing of farm products.

39. Perspective planning, even more than short-term planning, has no substance in the absence of technical research. Nevertheless, the problem of relative costs and returns from alternative uses of the agricultural resources, in relation to projected future needs, remains predominant. It will still be the main preoccupation in planning. The best possible judgements must be made in the light of the data and analyses available within the country, or in other comparable countries at similar stages of development. As already indicated, the gaps in knowledge, both technical and economic, required for better planning must be foreseen well ahead, and provision made for the needed research when allocating resources under the plan.

Reference

FAO and ECAFE, Report of the FAO/ECAFE Expert Group on Selected Aspects of Agricultural Planning in Asia and the Far East, Bangkok, 24 October to 4 November, (1960).

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By E.M. OJALA, Chief,
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Research Requirements and Types of Information Needed for Agricultural Development Planning

by

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SUMMARY

1. The planning of agricultural development cannot wait the perfection of the data. It is important to initiate the process of planning, assembling the information available in relation to each successive step and taking the most rational decisions possible. Note should be taken in passing of the gaps in the data, and the optimum amount of resources should be allocated under the plan to research designed to fill them, with a view to the improvement of later planning efforts.

2. Information is required (a) to evaluate the resources available for agricultural production; (b) to increase understanding of the functioning of the agricultural sector and the problems being encountered by producers; and (c) to enable quantitative relationships to be applied in the planning process, e.g. as between inputs and outputs. The paper considers the data requirements in relation to steps in the planning process.

Estimation of demand and future requirements of agricultural products

3. Surveys on food consumption and nutrition should be conducted for representative samples of farm households and urban households, for different regions and socio-economic groups if necessary. They should preferably include data on food expenditures or be combined with household budget enquiries, to show patterns of food consumption and expenditure at different income levels. These studies would enable coefficients of income elasticity of demand to be derived for different products of agriculture. Special diet and nutrition surveys of the most vulnerable groups of the population would reveal special nutritional problems. For primary exporting countries, reviews of the likely future demand overseas for their agricultural exports are essential.

Projections of production of agricultural commodities

4. The starting point is to study the present pattern of agricultural production, by more or less homogeneous agricultural zones as far as possible, to permit the more rational projection of output zone by zone. Agricultural statistics are a basic need, although rough estimates may permit planning to begin. A national agricultural census should be undertaken as soon as possible on lines recommended by FAO, and the progressive improvement in coverage and reliability of annual agricultural statistics should be provided for in successive plans.

5. Research should be progressively developed on both the physical basis and the economics of farming. A map of current land use, however fragmentary at first, will provide a framework for research on physical resources (topography, climate, vegetation including forests, soils, water) as well as the economic environment of agriculture (land tenure, farm sizes, markets, farming systems). From such research maps of land use capabilities may be gradually prepared for the guidance of long-term planning. The planning of development in new land areas should provide for the necessary physical resource surveys. A program of farm management studies, to be repeated at intervals of several years, should be designed to record and analyse the patterns of input and output on representative samples of farms in the main farming regions. Such studies should identify factors of farm organization and farm practice associated with better than average productivity (or worse than average). Additional research projects in land tenure, farm credit, marketing and farm prices are usually needed to elucidate further some of

the problems or potentialities revealed.

The selection of development measures

6. This is the hard core of planning. The aim is to select the combination of measures and projects which, in the circumstances of the particular country or sub-region, will produce the greatest result in terms of the national objectives under the plan, with the utmost economy in the use of the scarce resources available.

7. The previously mentioned studies of land use, descriptions of the main farming systems and surveys of farm organization and management are basic sources of vital data for planning at this stage also. Especially valuable are analyses of the responses to material inputs on individual farms e.g. fertilizers and irrigation in progressive amounts, singly, together, and combined with other inputs such as better seed and disease control measures, applied to different crops in different regions of the country. Studies of farm labour and farm employment in different systems of farming are also useful. These types of research should, if possible, be pushed to the point where quantitative relationships between inputs and outputs can be derived as working tools of planning, to be used with judgement.

8. To provide a basis for assessing the likely response to economic measures and institutional reforms, research should be conducted at farm and village level on marketing channels and prices actually received by farmers for their products and prices paid for fertilizers and other inputs. The results of such research will be more informative if supplemented by field studies of farmers' indebtedness and sources of credit. Studies of the economic behaviour of farmers, particularly in relation to incentives (e.g. assured prices), disincentives (e.g. high share rents) and receptivity to new improved techniques, would also be highly relevant.

9. The economic appraisal of individual projects in development countries still leaves much to be desired. Research and case studies are called for to elucidate principles and to elaborate methodology.

Implementation and review of plans

10. Annual reviews are an essential part of the planning process. Research and evaluative studies are required also, especially to analyse in depth the reasons for cases of notable failure or success in the implementation of plan projects, with a view to the improvement of subsequent plans.

Perspective planning and long-term guidelines

11. A long look ahead, (15 to 20 years) is particularly important in agriculture since many of the changes that have to take place occur only slowly, and the returns on certain types of investment are a long time in coming. In this perspective, questions of basic resources loom larger, emphasizing the need for basic surveys of land, forest and water (including fishery) resources, and maps of land-use capabilities. In addition to resource surveys, long range reviews on market demand, both domestic and export, are essential to guide the development of farming systems towards products in continuing demand.

Reference

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Agenda Item: H

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VALUES AND RELATIONSHIPS IN DEVELOPMENT PLANNING AND PROGRAMMING

By Louis-Joseph LEBRET,
Director General of Economy and Humanism

Papers have been contributed to the United Nations Conference on the Application of Science and Technology for the Benefit of the Less Developed Areas as working papers for that Conference. They are published as presented by the contributors, and the contents and the views expressed are those of the contributors. (See notes overleaf.)

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VALUES AND RELATIONSHIPS IN DEVELOPMENT PLANNING AND PROGRAMMING

By
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The science of development is so recent that we must not be surprised to find that it is still only exploratory. At the same time the desire for development has become so universal that it is necessary to lay down planning and programming methods which can be applied generally, not only so that they can be used by any country undergoing development but also so that comparisons and regional coordination of various plans is possible.

1. Evolution of the concept of the development plan

All experts now agree that development is a complex operation which must take into account numerous favourable and unfavourable factors, some physical and geographical, some economic; others biological, psychological, sociological and political.

Also every real development plan will henceforth consist of a series of sector plans, a series of area plans and a series of general plans. We are a long way from the simple idea of investment plans based on data covering a whole area and the spectacular working of a few localised resources.

Gradually development has come to mean exploiting many potentialities, which have to be studied one by one on the spot: potentialities presented by the soil-relief-climate complex, potentialities of the sub-soil and energy potentialities.

In addition account must be taken of available manpower, the extent to which it is capable of being adapted to other work, the mobility of the labour force, its qualification possibilities, its propensity for work and spending and saving.

The most promising theoretical plan comes up against the human element, the local population, the lack of technicians in all grades, attachment to established routine and resistance from influential persons. It is also hampered by disputes between different sections of the population, by administrative inconsistency and by instability or indecision on the part of the governing authorities.

It therefore comes about that, step by step, the plan becomes considerably wider in scope. It is no longer a question of physical and social infrastructures and agricultural, industrial and commercial structures, but of all structures considered in all their various aspects. The plan no longer appears as an act performed periodically but as a continuous deployment of data and forces in the hands of a single enlightened power capable of obtaining the co-operation of the inhabitants.

At this point the human factors appear to be as important, if not more so, than the economic factors. Unfortunately they fail to fit in with the simplification of the economic pattern, and will for a long time fail to do so, necessary though this pattern may be, because its significance is weakened by the intervening human element.

Thus the experts gradually endow the development plan with its full dimensions. After elementary plans laying down dates and proposing rather unrealistic figures of total production, it is necessary to look at the basic elements of the problem. The development of villages or rural rehabilitation then appears paramount. As a result of several failures we now understand that intermediate groupings should be organised between the summit and the base, and that it is necessary to use additional qualified teams of experts. Development can thus become an articulated movement from summit to base and from base to summit, ensuring that expansion is propagated downwards and rectified upwards.

It is interesting to note, from this point of view, the gradual convergence of methods used by development missions. An inventory setting out both requirements and resources seems today an indispensable preliminary to the establishment of a workable plan; so does the distinction between a long-term general plan, a medium-term executive or guiding plan, and an annual programme; so also does the preparation of plans covering sectors and regions, which should be as detailed as possible; and so finally does the need to set up a government, an administration and a system to stimulate development.

2. <u>The introduction of human factors is still inadequate</u>.

The science of development makes progress every year. Every development mission, when well constituted, is a real laboratory for the integration of science and techniques. The permanent planning bodies will also become laboratories of this kind, at least in countries where they are sufficiently well equipped. Since the various experts work together, each of them dealing with his own particular aspect, but the experts as a whole covering the entire field of development, the development mission and the permanent body employing it or which succeeds it can draw up soundly-based outline projects and period programmes which take both economic and non-economic factors into account.

However, although great progress has already been made, it would be a mistake to consider the science of development as fully established. From a general economic point of view the developers lack the statistical data which would enable them to undertake an exact study of structures and their evolution, and from a human and sociological point of view their approach remains rudimentary.

This does not mean that the human aspect is completely ignored, but man is primarily regarded as an element in production. He is first considered as a "useful" factor in carrying out the plan: there are too many or too few workers;

the skill and qualifications of the labour force are inadequate; the educational system should be extended, completed, rectified or improved; productivity demands an increase in the number of health centres and hospitals and the consequent training of medical personnel.

As a result of education and improved health however, man assumes his own importance as the ultimate object, but there is still over-emphasis either on the use of men for production or on education and health as ends in themselves.

This is doubtless because the actual idea of development has not been sufficiently elaborated. Since in the infancy of political economy it seemed that the creation of wealth was the essential objective, this wealth being for the benefit of all but no direct action for its distribution being necessary, at the recent beginning of the development age some people thought that economic development would entail progress in all directions. Thus confusion arose between "economic development" and "development". A considerable effort has been made to lay down the lines on which economic development should be based and the detailed measures by which it can be achieved, but there has been no corresponding effort to define the importance of development to civilisation.

Humanity desires development, not merely economic development. According to a saying dear to François Perroux, it is all of man and all men who are concerned.

Development as an operation thus becomes, for a particular population and for all its various components, a series of steps from a less humane to a more humane phase to be taken as rapidly as possible and at minimum cost, taking into account solidarities between groups and between populations.(1)

This definition applies to all levels of community life from the local to the international. It lays down, as objectives of development, individual human success and the raising of human standards of individual peoples and of all peoples.

It includes all aspects of development - economic, biological, educational, cultural, political and administrative - but man is always in the centre of the picture.

In giving the human element its proper place, the complex science of development becomes scientific in character to a maximum degree, all science being defined by its object. The aim of development can only be the advance of humanity towards better human conditions within small groups and as a whole. In other words, development is a problem of civilisation which science and technology must help to solve, giving maximum consideration to all human values.

The planner who confuses "development" and "increase in total quantities" runs the risk of finally provoking the reverse of development. This does not mean that an increase in total quantities is not necessary, but that the increase should be achieved with due regard to the human factor.

It is desirable, therefore, in planning to see that the action to be undertaken is carried out in such a way as to ensure that the psychological, cultural and spiritual concepts on which civilisation is based are not sacrificed to rapid and fragile growth.

(1) See our publication Dynamique Concrète du Développement, Editions Ouvrières et Economie et Humanisme, Paris 1961.

The economically and technically developed western countries were not subjected to change. Their process of evolution covered more than a century and permitted a gradual adaptation to new ways of production and new ways of life. Evolution did not, however, take place without creating certain psychological and social disturbances, especially as a result of the uprooting of populations, who became workers in urban areas with virtually no transition, and as a result of extreme differences in standards of living.

The sudden introduction of new techniques and new trading methods and the startling appearance of new means of communication renders much more dangerous the evolution of populations who find themselves confronted with the necessity of development in view of their increasing populations and their contacts with countries already developed.

3. Importance of systems of values

The over-simplified application of development plans based on the prevailing system of values in developed countries gives rise to disturbances both in individual behaviour and in social structures.

It is not merely a question of the states of injury caused by industrialisation and urbanisation, which have been examined in detail in Section G of this conference. It is perhaps more a question of the difficulties resulting from being successively associated with two cultures whose values differ greatly. The personal conflict and the social conflict of this "ambiguous adventure" have been carefully analysed by Sheik Hamidou Kane, Commissioner-General for the Plan in Senegal.

Such conflicts are inevitable and the leaders of a country who refused to face them would condemn their people to regression. It is not, therefore, a case of retreating from an affront, but of reducing the loss of values which may be involved and making the most of the values to be gained.

In drawing up a development plan it is essential to take into account the systems of values with which one has to deal, how they persist and how deeply they are rooted, and how authentic and effective they may be in their particular field of action.

From this point of view present planning methods are far from up-to-date. Doubtless psychological and sociological factors are beginning to be considered, and this represents considerable progress, but in general psycho-sociological study is either tacked on to the study of the economic aspect or is only undertaken as far as economic results make it desirable.

By simplifying the problem, it is possible to reduce to four the systems of values to be found in existence or in competition with each other in a country seeking development: the native system, the western-plus-capitalist system, the western-plus-socialist system and the communist system.

Economically the native system involves traditional techniques, respect for existing methods of land ownership, maximum security in order to guarantee a minimum means of subsistence by direct production or limited trading and finally a distrust for innovation.

A certain equilibrium has been obtained which, as regards the biological requirements of subsistence, takes account of the cultivation and conservation of the soil, the complementary nature of crops and hunting, fishing and gathering possibilities.

Affective, intellectual, aesthetic, ethical and spiritual values[2] are, in most native civilisations, closely related to economic values. The overall equilibrium characterising a civilisation results precisely from a certain coherence in such relationships, even if the total system of values, as is always the case, includes a certain proportion of non-values which have been integrated into it.

Any change in the economic régime has repercussions on the total system of values which make up a civilisation. The same applies to technical innovations when they are particularly drastic. The process is accelerated by literacy and education, which build up a mental world totally different from that previously known.

The speed of the impact produces a break quite different from those which marked 19th century evolution in the countries where capitalism and industrialisation were created. The social and political disturbances which occurred in Europe as a result of this relatively slow evolution are well known.

Planning which does not take account of economic factors gives rise to far more serious disturbances.

Economic planning is, however, a sine qua non condition of development and is both desirable and necessary.

Economic development and planning should not be rejected. On the contrary their success should be ensured by subordinating them and attuning them to the human element. The concept of "human values" must always be kept in mind by the members of the external, indigenous or mixed team responsible for drawing up the plan.

4. Integration of systems of values

Normally a good plan is prepared by a joint team if, as most frequently happens, the country has not yet a sufficient number of experts available with the necessary knowledge of the science of development. Even if research leadership is entrusted to outside experts, the decision is always left to an indigenous authority - a Planning Ministry may have been set up, or a Planning Commissariat guided by the head of the government or the head of state. It is always essential that the team in charge of development or responsible for drawing up the plan should include experts of the country concerned in all sectors where they exist.

The preparation of the plan then becomes a joint effort in which initial and subsequent major decisions are always taken by the local government in the light of preliminary investigations and assembled data, without which the plan would be no more than a fantasy.

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(2) The categories given here are those used by Louis Lavelle in his Treaty of Values. In our opinion they can be applied to any civilisation.

The necessary coordination between outside experts, local experts and national authorities can only be brought about by continued cooperation. The outside experts will be fully aware that the plan is not a scheme to be grafte on to the previous economy, but, if a prospective or perspective plan, a long-term vision of a coherent evolution; if a medium term plan, the programming of sector or regional action coordinated in the light of this vision; and if an annual plan, an adjustment required as a result of limitations or excesses in implementing larger plans.

Outside experts should take care not to employ scales of values from their own civilisation, and not to accelerate the propensity to imitate the West which is often excessive in the upper and middle classes.

Indigenous experts and technicians should be trained to have a critical approach to imported non-values and to recognise authentic local values, which should be protected and intensified, and traditional non-values, which should gradually be eliminated.

One of the great dangers to be avoided in a country desirous of development is to have large discrepancies between the living standards of various classes. If the upper and middle classes attain a very high and constantly increasing standard of living while the urban proletariat increases and rural populations are in a state of stagnation or decay, the birth and establishment of a real democracy are retarded and the seeds of future social revolt are sown.

This is all the more important in view of the fact that the very desirable extension of education will sharpen the critical sense of the masses of the people and also their reactions and aggressiveness.

In other words development must be integral in the sense that all classes of the population must benefit from it, in particular those least favoured; the upper classes must be satisfied with what is "functionally" necessary to them instead of giving way to ostentation. Action must be coordinated so that the development of agriculture, industry and services is linked, as must be rural and urban development and economic and social development.

It can also be said that development must be administered in such a way as to produce a social order in which each finds opportunities "to have enough" and "to be worth more". Understood in this way development is something quite different from raising the total figures of a production which is ill distribut it is the dynamic coordination of old and new values, of indigenous and imported values.

This seems to be one of the main aims of the political leaders who wish to create what they call an "African socialism", which would be an original socialism adapted to development requirements by relying on the effort of the masses, who would be consciously associated with implementing the general plan and with preparing local plans.

It would, ultimately be a question of establishing as completely humane an economy as possible under a system of effective solidarity.

This would obviously necessitate gradual education at all levels of economic, social, political and administrative responsibility, from summit to base and from base to summit, based on both truly African and universal values, on making the regional and national élite aware of their responsibilities, on organising courses to familiarise development problems and on supplying objective information on the situation, requirements and possibilities of the country.

5. Establishment of new relationships

Although the essential aim of development is the rectification and intensification of human values, i.e. the proper utilisation of the human being, this demands a certain climate in human relations. The dynamic coordination of values is also the coordination of relationships. This coordination is brought about in part by an education anxious not only to foster the idea that freedom should be used for the benefit of others and to encourage a friendly attitude to others and a willingness to assist them but also to create an awareness of duties towards the human groups to which one belongs.

Coordination was more or less assured in earlier civilisations by traditional institutions which laid down individual rights and responsibilities and defined the relations between age groups and classes. When initiating development it is inevitable that previous relationships should be disturbed, especially in a country which has only recently become independent.

It is impossible and it would indeed be a serious mistake, to attempt the immediate transformation of traditional structures and relationships. It must be recognised however, that these must gradually be modified in order to remove certain obstacles to development and encourage general acceptance of the idea of development.

A development plan always involves great changes in the organisation of power and administration and in the conditions under which new types of leaders may appear. Intensification of commercial relations and new forms of credit or producers' organisations also bring about changes in social relations.

New techniques of soil cultivation raise questions of land tenure, whilst the establishment of industrial undertakings and greater travelling facilities extends and modifies the network of relationships.

An exclusively economic plan which took no account of new forms of community life and consequent changes of outlook, of new services being established or of legislation defining rights, civic obligations and association structures, would certainly bring about a state of anarchy as the old order gradually disappeared.

Development can only succeed and endure under a legal system laying down limitations on freedom whilst allowing it to be exercised for the common good at village, regional and national level. In practice, tribal, racial and religious differences often hamper the application of this principle and have to be taken into consideration in order to maintain and consolidate national unity, which is in constant danger of collapse.

The problem of individual or group relationships is also complicated by relations between groups living within given frontiers, often artificial and fragile. The emerging nations are not yet quite nations and the implementation

of a serious development plan strengthening solidarities is the surest way of achieving this status. In order for them to do so, each group must feel that it is part of a dynamic whole in which it has its own place and its opportunities to benefit from the total development operation.

The regional populations will gradually become aware that, as a result of improvements affecting them, their own resources can be used to better advantage in a trading network which will ensure their basic needs and the gradual attainment of a higher standard of living.

It is thus clear that the first medium-term plan can only be a basis for the most urgent action pending greater certainty as to what can finally be accomplished according to the degree of national or foreign aid forthcoming. Planning always involves a hazardous forecast, the adaptation or success of which depends very much on the character of the planning body and the constructive vigour of the political authority.

In any event, where development does not both preserve and create values, including relationship values which establish the desired responsibility, effective cooperation and internal peace and the apparently spectacular results of uncoordinated projects which are not synchronised with human development will only be the prelude to ultimate failure.

6. Transition to the international level

The problem of values and relationships in development planning and programming should not be considered only at the national level. From now on no country can live out its future in isolation. There are neighbours who may be jealous or aggressive or have a different concept of development. Countries thus build themselves into fortresses with closed gates or group themselves according to temporary ideological affinities, ignoring their common civilisation and economic interdependence.

Instead of pooling and coordinating regional values, countries take on the heavy burden of individual watertight plans. One value which it is most important to emphasise is that of "solidarity" within a natural economic area, where a rational use of infrastructures would avoid duplication of costly work, whether this involved power, communications, research centres or universities.

Solidarity must, however, be extended further. No country, no regional zone, can regard itself as being entirely independent. The economically, technically or culturally less developed world needs the more developed world. The more developed countries need the raw materials and energy of the less developed countries. Political and strategical factors, either for capitalist gain or ideological expansion, impose relationships on the world which are quite abnormal in this era of our history.

Developed and less developed countries should find the courage to re-examine together not only how far it is possible to reach agreement on the common values which should be encouraged, the individual values which should be respected and the civilisation of solidarity which should be established, but also the radical changes to be envisaged in supranational and international relations in order that the overall development problem may become soluble.

To continue on the present mistaken lines with piecemeal and incomplete work by the planners will be to a large extent useless.

Apart from development techniques another problem arises today, that of working out a development ethic on which the main lines of an international code of development could be based. Given human solidarity, the right of all peoples to development and to cooperation for development should be recognised and respected in order that the total effort may be coordinated, thus avoiding the present confusion of demand and response. In this way aid would lose its humiliating and chaotic character. The duty to give aid would be matched by a duty to make good use of it. Disparate planning methods could then be sufficiently standardised so that waste due to improvisation or considerations of prestige was eliminated. International regulations governing trade and assistance could enable the less favoured peoples to keep the semblance and also the reality of their independence. They would no longer be beggars holding out their hands or would-be blackmailers playing on the dissensions of the Great Powers or the interested competition of those offering assistance. It is time to think of a new international order, sweeping away old methods of exploitation and new methods of competition.

Thus the general economic organisation of development could replace the inevitable phase of clumsy trial and error, which should now be ended. Development strategy should be laid down after calm consideration of varied requirements and dispersed resources. A coherent development of the world could become the prime objective of humanity and the disinterested coordination of plans with a view to achieving maximum use of both manpower and structures the noblest task that could be undertaken.

But an essential preliminary step is required. As regards existing systems of values and relationships, it is necessary to have the courage to undertake a critical examination of the concept of man "being more" rather than "having more", an idea to which some people still wish development to be restricted.

Rightly directed, development must become both more scientific and more humanistic. Each development mission or body has its contribution to make by improving its methods and by making its target more universal over the longest possible period of time.

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VALUES AND RELATIONSHIPS IN DEVELOPMENT PLANNING AND PROGRAMMING

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VALUES AND RELATIONSHIPS IN DEVELOPMENT PLANNING AND PROGRAMMING

By
LOUIS-JOSEPH LEBRET,
DIRECTOR GENERAL OF ECONOMY AND HUMANISM.

SUMMARY

The evolution of the concept of development places increasing emphasis on the necessity of taking account of non-economic factors in development planning, i.e. biological, psychological, sociological, political and even ethical and spiritual.

The methods by which plans and programmes are prepared must therefore be improved.

The introduction of human factors is still inadequate, man still being regarded primarily as an element of production and not as a person to be utilised for his own sake. Genuine development means passing from a less to a more humane phase for all sections of the population. This aspect of development is essential.

Development depends on a system of values, which must always be studied when drawing up an inventory of requirements and resources. Development always involves the confrontation of several systems of values. Failure to take account of the indigenous system of values limits the chances of success when implementing the development plan.

Planning, instead of creating conflict between different values, should lead to integration. When a development mission has been called in from outside, it is important that indigenous experts and technicians should be invited to work with it. Otherwise the development plan, if grafted on to the previous civilisation, will cause sociological and political disturbances which the country will find it difficult to control.

Foreign experts must take great care not to apply scales of values of their own civilisation. Governments must encourage original education which will meet the country's real needs and be based on previously established authentic values.

Development, by modifying economic structures and traditional institutions, brings about a change in relations between persons and groups. Care must be taken to see that this change does not lead to excessive social tensions and psycho-sociological disturbances.

Provision should therefore be made for transitional phases and the consequences of innovations considered before introducing reforms. The population only becomes aware gradually of the advantages of new ways of solidarity.

The problem of values and relationships does not arise only at national level. National efforts for development would often fail without regional coordination of national plans and without new forms of international co-operation. With this in mind it is necessary to train qualified coordination teams now and to prepare an international development ethic on which an international development code could eventually be based.

It thus appears that the scientific and moral demands of development can be expected to increase in the coming years and that organisation, planning and programming methods will have to be adapted accordingly.

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Agenda Item: H

Bulgaria

PLANNING AND PROGRAMMING OF JOINT SECTOR PROJECT

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PLANNING AND PROGRAMMING OF JOINT SECTOR PROJECT

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Deputy President of the State Planning
Commision

I,1. The subject of this report are the problems of methodology related to the drafting of an economic plan according to the different branches of economy, under conditions of highest coordination among the branches so as to ensure the necessary unity of the system of planning indices as a whole. These remarks on methodology have been drawn from practical work on setting up long-term plans in the People's Republic of Bulgaria, What is typical of this project is the fact that it refers to a small country of a medium level of economic development. In addition to that, the problem tackled by the plan is to attain high rates of economic development.

I,2. Initial prerequisites:

a/ Opportunities of uninterrupted and rapid intensification of the international division of labour and, consequently, of reaching the highest specialization in the field of national economy.

b/ A system of foreign trade prices on which trade among the socialist countries is based. This system reflects the costs of manufacture in a correct manner.

I,3 Under these prerequisites, the immediate technical and economic purpose of the plan is to make available and to use to the maximum degree all natural and labour resources of the country at such rates of development as will secure the necessary accumulations of capital investments necessary for this development.

II. The drafting of the plan passes through different stages and through a number of variants.

During the first stage of the drafting of the plan, the principal task is to prepare the initial materials and to carry out the initial studies. Work at this stage proceeds along a number of basic lines simultaneously. These lines will be discussed later on. The materials refer to the individual economic branches and to the trends of the economic development as a whole, with due regard to the specific conditions prevailing in the respective branches and fields of activity.

This stage does not yet include the task of calculating the relations among the separate branches, nor does it involve calculating the dependencies among the indices. On the contrary, the task is to prepare material for the following stages at which the initial indices are being determined on the basis of their mutual relations.

II, 1a. Characteristics of the natural resources of minerals and drafting the first variant of the mining industry.

Most significant at this stage is the assessment of the expected reserves of mineral raw materials. Use is made of the established scientific data about the geology of the country. The organization of the work to be done is based on setting up an extensive system of commissions composed of highly qualified geologists from the country. These commissions study the existing materials on the geology of the country and draft a prognosis of the geological reserves which have a bearing on metallurgy, chemistry, manufacture of building materials and power production.

The materials related to the water resources of the country are also summed up and arranged systematically in connection with the prospects of developing hydro-power in close relation with the other aspects of the water problem.

On the basis of the above data, an operative group of experts drafts a programme of referring the reserves from a lower to a higher category. The following documents are drafted:

- A balance of the reserves of mineral raw materials per categories. One of the items of this balance is tne expected yield of minerals referred to years of the corresponding period. One of the initial items in drafting the balance and in determining the expected yields is the necessity of ensuring sufficient reserves for the operation of a particular enterprise after this period.
- A characteristics of the geological condition determining the economic parameters of the expanding yields. This is done with the precision of the geological conditions which is possible at this stage.
- On the basis of existing machinery and equipment and of the work done in the field of geological studies and mining, as well as on the basis of the apparent trends in their development, a determination is made of the preliminary indices of the capital investments necessary, of the necessary machines and equipment, pertinent labour productivity and number of workers, composition according to qualifications, etc.

II, 1b. A second parallel line of work is directed towards studying the natural resources in rural economy. The tasks in this field are as follows:

- Determining the possible expansion of agricultural areas. The first initial indices about forthcoming work on reclaiming and irrigating land are drafted in this connexion, due provision being made for the new machines and equipment necessary, for capitals, trained personnel, etc.
- Groups composed of highly qualified experts in their respective fields study and sum up the entire existing material on the conditions of soil and climate in the different regions of the country.
- Two trends of further work are determined on the basis of the material collected: optimum structure of agricultural crops with a view to the specific natural conditions and the possible increase of yields per unit area on the basis of specific natural conditions and following operative groups of specialists prepare data about the dynamics of the areas under cultivation with regard to crops cultivated, as well as the dynamics of average yields.
- In this connection, the following stages involve determining the equipment necessary, capital investments, introducing machinery in agriculture, the dynamics of the rates of introducing chemical fertilizers, as well as the indices referring to the development of the systems of irrigation.

In the course of the implementation of the plan, the entire system of data will continue developing towards perfection by the application of the means of linear programming.

II, 1c. A third line of work in connexion with the natural resources and with the mining industry refers to forestry.

The problem to be solved in this field is to determine the areas subject to complete afforestation, to make a preliminary assessment of the reserves of wood and to determine the rates of their exploitation.

Based on this material, an elaboration is made of the resource side of the preliminary balance of the wood, according to categories and sizes, The elaboration continues in the field of effectively utilizing this wood in accordance with the achievements of chemistry and of the technology in woodworking.

Parallel with the initial data in this field, elaboration is made of the preliminary programmes related to equipment, capital investments, labour force needed, etc.

II, 1d. In this manner it is possible to throw light on the prospects of the growth of the resources of mining industry, power output, agriculture and forestry, as well as on the facts and conditions related to their progressing utilization. The materials accumulated in this manner serve as a basis of further work related to the manufacturing industry.

II, 2a. Parallel with the entire work on studying natural resources and on the conditions of their utilization, a second basic line of preliminary work is connected with the problem of the balance of the labour force.

The initial data of this balance are the demographic studies and calculations made. The immediate inference from the demographic calculations is to determine that section of the population which is capable of employment. There are two aspects to this problem: the first one is to determine the normative fund of the population capable of employment which, according to the practice adopted, includes the population between 16 and 55 years of age for women and between 16 and 60 years of age for men. The second one is to determine the remaining fund of working population which includes people with preserved capacities for work above these age limits.

II, 2b. The number of people capable of employment does not yet determine the effective number of the population which will be actively employed. Under conditions prevalent in our country, the difference is in the first place dependent on the number of housewives who are not regarded as active population. Reducing their number in perspective is determined at the preliminary stage of the work on the basis of extrapolation of the trends which have been active in the past, the terminal point being a great reduction of the non-active section of the population. The basis of this trend is taking over of the cares related to running a household on the part of publicly organized enterprises, as well as modernization of work in the households.

The composition of the non-active population capable of employment includes the students who are in the above age brackets. At the stage of preliminary drafting, their number is determined again on the basis of extrapolation and of considerations about the necessary improvement in their qualifications.

II, 2c. The active population falls into two categories: people engaged in the field of material production /industry, agriculture, transport, building and trade/ and people engaged in the field of activities, administration, etc./. The preliminary stage takes stock of the trend towards an absolute increase in the number of people engaged in the sphere of services.

II, 2d. Parallel with that a determination is made of the preliminary indices related to a gradual reduction of the working hours per week per employed person.

Following along this line it is possible to obtain the effective fund of working hours which are at the disposal of the nations for the needs of material production at the individual stages of the envisaged period.

It becomes clear from the above that these data are of a preliminary character. Further on, by means of iteration, they are being specified with the elaboration of all remaining indices of the plan.

II, 3. A third basic line of work at this same preliminary stages comes to explain the prospects of the needs and of the growth of consumption. The task at this stage is to prepare data which should be rendered more specific during the following stages. Commissions of experts are set up to establish the most probable rates of consumption on a scientific basis.

II, 3a. A number of institutes at the Academy of Sciences, helped by experts assigned to them for this purpose, establish rational norms of the composition of food, from a medical point of view. The problem at this stage is to determine the terminal point which is the purpose of the development of national economy, ensuing in the first place from considerations of medical expediency. A detailed treatment of this problem, in connexion with the resources of the country's economy, is a task to be settled during the following stages. At this very stage, however, the treatment of the problem includes, in addition to medical considerations, provisions about possible changes in the tastes and habits of the population, as is the case with the preliminary indices about the possible consumption of alcoholic drinks, tobacco, etc.

II, 3b. Working in an analogous manner, special commissions prepare norms reflecting the most probable development of consumption related to textiles and shoes.

II, 3c. Other groups of experts work on the preliminary data related to the policy to be followed on the housing problem, living conditions, cultural necessities, etc.

II, 4. At this stage of the work on the plan it is necessary to adopt yet another preliminary index which is subject to correction further on. This preliminary index is the extrapolated growth of the volume of the aggregate social product and of the national income.

On the basis of these indices it is possible to calculate the preliminary volume of capital investments which will be available to the country at each separate stage of its development. This preliminary calculation calls for extrapolating the structure and trend in the distribution of national income between the fund of consumption and the fund of accumulation, in the composition of accumulation, between the growth of capital investment and the growth of turnover funds, etc., and, in the composition of consumption, among its bigger groups.

II, 5. These preliminary studies related to resources and consumption lead to the accumulation of abundant material which can be used in drafting the plan.

III, 1. The task of the following stage which marks the beginning of drafting the variant of the plan is to determine the structure and rates of development of the manufacturing industry, as well as to connect all indices in one system by calculating the relations among the branches.

III, 2. The following conditions of principle are taken into consideration in determining the indices typical of the development of the manufacturing industry under economic conditions of Bulgaria.

- To introduce serial methods in industry to an optimum degree, in accordance with the existing technological level and particularly in accordance with its development in perspective.

- Full utilization of the fund of working hours available to society in the different periods for the needs of the manufacturing industry, after a part of the total fund has already been engaged in the sphere of services, on the one hand, and in the field of the mining industry, on the other.

The problems which ensue from the ratio between the natural resources, on the one hand, and the labour resources, on the other, come up at this stage. The drafting of the plan takes stock of these problems in determining general policies in the field of the manufacturing branches, particularly the extent to which the country should specialize in the branches with a relatively small share of raw materials and a relatively big share of processing and manufacture, as well as the extent to which specialization can be undertaken in the branches of the manufacturing industry possessing an inverse ratio.

The consideration underlying the selection of the branches of the manufacturing industry in connexion with the above data is for the transport of raw materials and finished goods to the place of consumption to reach an economically justified volume.

All these considerations are sufficient as a basis of drafting a plan about the optimum form and degree of specialization in the manufacturing industry.

IV, 1. After the completion of the preliminary stage and of the calculations related to the manufacturing industry, the organs of planning in the country possess all necessary initial data to undertake an all-round calculation of the relations among the branches which establish the correlation between needs and resources. The relations among the branches are calculated in our country without the aid of electronic machinery. Under conditions of ordinary mechanical and electrical machines, as prevalent in our country, four to five months are necessary to work out the first variant of a combined national economic plan with calculated relations among the branches.

IV, 2. Calculating the relations among the branches is done on the basis of technical coefficients which expressed the prospects of technical development, inasmuch as they can be assessed and forecast at this stage.

Technically, the relations among the branches are established by means of over 500 balances for the separate major types of produce or groups of products. Based on these elementary balances expressing the relation among the branches in a most direct manner, a system of generalizing balances is set up in terms of indices of value. Both balances go in to compose the system of the entire balance of national economy. In the course of the work of preparing these balances, the indices adopted as preliminary models during the first stage are gradually rendered more precise and specific in connection with their dependence on the other indices.

IV, 3a. There are two aspects of linking the branches by means of the balances of the basic types of products. The first aspect embraces the relations among the branches within the framework of a period of one year. Their basis are the objects of labour such as raw materials, semi-finished goods and materials.

IV, 3b. Another aspect of coordination by means of balances refers to the relations among the branches on the basis of the means of labour. In view of the nature of the object, the task here is to coordinate the branches within the framework of periods longer than a year, in other words, to coordinate the different stages of the period in perspective among themselves.

An instrument of this coordination in dynamics are the balances of the machines and the plan of capital investments.

The basis of the plan referring to capital investments are the technical coefficients of the productive capacities of the respective machines and equipment, as well as the indices referring to the growth of labour productivity.

The technical coefficients make it possible to establish the relation between capital investments and the industrial programme, while the indices of labour productivity help to establish the link between these two documents of the plan with the plan related to labour resources, as well as to correct the initially accepted indices and hypotheses.

IV, 3c. The growth of production, already coordinated with capital investments and with the expense of materials along the relations among the branches leads, in an inductive manner, to the index of the dynamics of the national income.

IV, 3d. Comparing the dynamics of the national income, the investments already calculated, and the calculated volumes of consumer goods makes it possible to determine the proportion between accumulation and consumption which was accepted as a hypothesis at the initial stage of the work. If the proportion, as calculated, between consumption and accumulation is assessed as rather strenuous, in the following variant-model of the plan it is necessary to provide for a reduction of the capital investments and for an eventual delay in the rates of development. In this manner, it is possible to undertake an empirical check of the preliminary hypothesis about the total rates of growth.

IV, 4. In drafting the system of balances, the line of fully utilizing the specific natural conditions and of introducing the optimum degree of serial production, a line adopted as early as during the preparatory operations, leads in every individual balance to raising the relative share of that section of the final production which constitutes a part of the export and import. In this connexion, when the first model-variant is ready, we already have a model related to the development of export and import which will serve as a basis of coordination on an international scale. The existing trend of specialization is expressed in the more rapid growth of the envisaged trade, compared with national income. In this manner, the initial prerequisites for the intensified international division of labour obtain, at the first variant-model, the form of a concretely calculated necessity of intensifying the integration in the socialist economic system of which our country is a composite unit. The theoretical prerequisite proved to be practically demonstrated in our experiment. This tendency constitutes, in the instance of a small or medium-sized country, a general condition determining its possibility of utilizing its resources and of ensuring its development.

V, 1. The drafting of the first variant-model is followed by stages of specifying and improvement by means of a number of subsequent variants. In the case of each new variant, the data of the preceding one furnishes ample opportunities of precisely specifying the data in the next variant. The number of these variants ranges between five and six in our country, their terms being shorter than the ones offered by the existing methods of computation.

V,2. It must be emphasized that the already determined variant on a hifher basis possess indices which express results of prognoses reffering to certain elementary parameters. The authenticity of the entire work depends on the precision of the prognosis. The prognosis refers, as we said in the beginning, to geological reserves, to the development of the elementsry norms of consumption. as well as to

elementary norms expressing the development of technology, Of course, efforts are made during the very drafting of the plan for the prognoses of all these elementary parameters to be as precise and possible.

V,3. Despite all that, however, it cannot be expected that these prognoses can be perfectly precise, particularly for a twenty-year period. That is why the very concept of perspective planning needs clarification. The task of a perspective plan, particularly of a long-term general plan, is not to elaborate on the indices, to fix them as a dogma, so that they shall remain unchanged during the entire period of their implementation, and it is not to channel life within a pre-cast framework. The long-term plans are steadily undergoing improvements in the course of development, on the basis of their partial fulfilment, on the basis of new technological and scientific discoveries and on the basis of prognoses which become more precise.

V,4. In this sense, the practical use of the long-term plans consists in correctly determining the trends of development, the initial positions and the rates to be followed, in correct sequence of building the big industrial enterprises in the country and in strict coordination of all these quantities.

What is more, a long-term plan, conceived precisely in this sense, is a sound foundation for taking stock of the changes which will be introduced by life under conditions of coordination, and not in an isolated and detached manner. The very coordination of the development, - the principal purpose of the plan is, as we can see, a dynamic one and not a sttatic one at all.

All this makes it possible for the long-term plan to be operative as a sufficiently effective instrument for an organized and expedient utilization of the forces and capacities of the nation to attain rapid economic progress.

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SUMMARY

Agenda Item: H

Bulgaria

PLANNING AND PROGRAMMING OF JOINT SECTOR PROJECT

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Corresponding Member of the Bulgarian
Academy of Sciences,
Deputy President of the State Planning Commission

Papers have been contributed to the United Nations Conference on the Application of Science and Technology for the Benefit of the Less Developed Areas as working papers for that Conference. They are published as presented by the contributors, and the contents and the views expressed are those of the contributors. (See notes overleaf.)

NOTES

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PLANNING AND PROGRAMMING OF JOINT SECTOR PROJECT

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Academy of Sciences
Deputy President of the State Planning
Commission

SUMMARY.

The report refers to the problems of methodology related to the drafting of an economic plan as per different branches and reflects the practice adopted in the People's Republic of Bulgaria in the field of long-term planning.

As a part of the socialist system, it is possible for Bulgaria to ensure an optimum specialization of her economy on the basis of the international division of labour.

The process of drafting the plan passes through various stages and several variants.

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During the first stage of drafting the plan, material is accumulated by means of preliminary studies of resources and needs, which is used as the basis of drafting the plan.

Work proceeds according to the following basic lines:

a/ study of the natural resources.

- Groups of experts study the natural resources of minerals and draft the first variant of the plan related to the mining industry. Parallel with that a determination is made of the investments of capital, of the machines and equipment necessary, of labour productivity and the number of workers necessary to implement the undertakings in the field of geological survey and mining.

- A study is made of the sources of water power and of the water problem as a whole.

- A study is made of all conditions related to the development of agriculture, to finding the optimum structure of the agricultural crops and to the greatest possible increase of yields. The necessary capital investments, equipment, chemical fertilizers and manpower are also determined.

- A determination is made of the reserves of wood and of the rates of its exploitation in a most efficient manner. Here, too, a preliminary programme is worked out for the needs of equipment, capital investments, manpower, etc.

b/ study of the problems related to the balance of manpower.

A determination is made of the number of the population capable of employment, the active population in particular, reflecting the effect of the changes in the number of housewives and students belonging to the age-group of persons capable of employment. This is done on the basis of extrapolation and of assessing the time necessary to improve their qualifications. An assessment is made of the number of population to be engaged separately in the sphere of material production and in the sphere of services. Indices are determined for gradually reducing the number of working hours per engaged person during the week. As a result of this, a determination is made of the effective fund of working hours which will be at the disposal of the nation for the needs of material production at the separate stages of the period in perspective.

c determining the growth of consumption.

- Commissions of experts determine the most probable rates of cosumption. This they do on a scientific basis and ensuing in the first place from comsiderations of medical expediency.

- Further groups of experts establish the needs of textiles and shoes and prepare data related to the policies on the problems of housing, living conditions, cultural requirements, etc.

d/ preliminary assessment, on the basis of extrapolation, of the volume of the social product and of the national incomes, as well as the volume of capital investments in the separate periods.

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Based on the initial data about the resources of raw materials, about the balance of working hours and about the general rates of growth, the structure and rates of the manufacturing industry are determined in a tentative manner. The optimum form and degree of specialization is sought in determining the programme of the manufacturing industry.

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After the completion of the preliminary stage and of the variant of the manufacturing industry, the next stage is to make a comprehensive calculation of the relations among the branches on the basis of coordinating needs and resources. About 500 balances are set up for the most important types of products, and a system of generalizing balances expressed in indices of value are set up on the basis of these 500 balances. In the course of the above operations, the indices which were accepted as preliminary models at the first stage are gradually becoming more specific and precise as a result of their dependence on the other indices. There appear data about the amount of exports which the country can offer, as well as data about the necessary imports.

The drafting of the first variant-model is followed by new variants which are more precise and are five to six in number.

The long-term plans drafted do not remain unchanged during the entire period of their implementation. It should be stated that the aim of the long-term plan is not to work out and fix indices which should be regarded as dogmas. In the course of development, these indices are being further elaborated on the basis of the achievement during the respective periods of their implementation, on the basis of subsequent scientific and technical discoveries and of opportunities to specify the preliminary prognoses with greater precision. In this sense the long-term plan is a dynamic and effective instrument of organized and purposeful utilization of the capacities of the nation.